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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,692	04/10/2001	Michael D. Derocher	10008416-1	9260

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

LIANG, REGINA

ART UNIT PAPER NUMBER

2674

DATE MAILED: 03/25/2004

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,692

Applicant(s)

DEROCHER, MICHAEL D.

Examiner

Regina Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 13-16, 18, 22-27 and 29 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 17, 20, 21, 28, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/19/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-8, 10, 13-15, 18, 22-25, 27, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al (US. PAT. NO. 6,621,473 hereinafter Lai) in view of Aufderheide et al (US. PAT. NO. 6,587,097 hereinafter Aufderheide).

As to claim 1, Figs. 1 and 2 of Lai discloses a touch screen device comprising a touch layer (11), a third layer (cool light layer 13) including a light emitting material which generates light in response to the operator input (operator input being the operator turning on the electronic device, e.g. see col. 2, lines 54-58), a fourth layer (back light layer 15) which generates light of a different color than light generated by the third layer (see col. 3, lines 1-5, 13-14 for example). Lai does not explicitly disclose the touch layer comprising a translucent cover layer and a second layer which includes a plurality of surfaces. However, Aufderheide teaches a touch screen is a capacitive or resistive touch screen (col. 1, lines 24-25), wherein the touch screen includes a translucent cover layer (flex 20 in Fig. 2), a second layer includes a plurality of surfaces (42, 44, 30 in Fig. 2) and being constructed using a translucent and conductive material (see Fig. 1, and col. 2, line 53 to col. 3, lines 13 for example). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the touch layer of Lai to

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have the first translucent layer and second layer which includes a plurality of surfaces as taught by Aufderheide in order to provide a touch screen device that can sense the pressure of the touch and to provide a touch screen that is relatively transparent for viewing of media generated by the display device.

As to claims 2, 6, 22, Lai teaches the operator input including a user's finger (col. 1, lines 17-18), and the operator input being used to control an aspect (icons) of a computer display controlled by the computer device.

As to claim 4, Lai teaches the touch screen is applicable to an electronic data processing device, such as notebook computer, PDA, etc., so Lai's touch screen is used to control the aspect of computer display is conveyed through a wire line link between and touch screen and the computing device as claimed.

As to claims 5, 7, 25, Aufderheide teaches the plurality of surfaces function by responding to changes in capacitance between adjacent ones of the plurality of surfaces.

As to claim 8, Lai teaches the touch layer is a transparent layer (as shown in Fig. 3, the operator can see through the icons from the touch layer) so the plurality of surfaces are constructed using a material which is transparent.

As to claim 10, Lai teaches the electronic data processing device launches a software application that runs on the processing device in response to the user input.

As to claim 13, Lai teaches the light emitting material is an electroluminescent material.

As to claim 14, Lai as modified by Aufderheide does not disclose the third layer having the light emitting material comprising a LED. However, col. 3, lines 3-5 of Lai teaches that a light emitting material comprising a LED. Thus it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify the light emitting material of Lai as modified by Aufderheide to comprise a LED to provide a compact and light weight light emitting layer to reduce the size and weight of the device.

As to claim 15, Lai teaches the first, second and third layers are substantially two-dimensional.

As to claim 18, see the discussion of claim 1 above. In addition, Lai teaches a third layer (the icon layer 12 and the cool light layer 13) includes a light emitting layer, wherein the light emitting layer is arranged to present a particular symbol (icon) to the user.

As to claims 23, 24, Lai teaches the computing device could be a notebook computer, PDA, etc., therefore, it is inherent that the aspect of the display would comprise a position of a cursor or a scroll bar used in a window of the display.

As to claim 27, Lai teaches the computing device is a laptop computer (notebook or handheld computers).

As to claim 29, Lai teaches the fourth layer (back light layer 15) which generates light of a different color than light generated by the third layer (see col. 3, lines 1-5, 13-14 for example).

3. Claims 3 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Lai and Aufderheide as applied to claims 1 and 18 above, and further in view of Chan et al (US. PAT. NO. 6,061,051 hereinafter Chan).

As to claims 3 and 26, Lai as modified by Aufderheide does not disclose the control of the aspect of the computer display is conveyed through a wireless link between the touch screen device and the computing device. However, Chan teaches to use a wireless interface for

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conveying signals between the computing device and the touchpad (col. 11, lines 18-24). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lai as modified by Aufderheide to use a wireless interface for conveying signal between the computing device and the touchpad as taught by Chan since a wireless connection provides the user more freedom of motion and mobility without being limited by the constraints of a wired connection.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai and Aufderheide as applied to claim 1 above, and further in view Shediwy et al (WO 00/23873).

Lai as modified by Aufderheide does not disclose the operator input is a character entered on the translucent cover and the generated light formed a trace of the character. However, Shediwy teach an operator input is a character entered on the touchpad cover and the generated light formed a trace of the character (see Fig. 11). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lai as modified by Aufderheide to have a character input as taught by Shediwy so as to provide a touch screen enable to enter character information and to provide visual feedback to the user.

Allowable Subject Matter


5. Claims 11, 12, 17, 20, 21, 28, 30, 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


REGINA LIANG
PRIMARY EXAMINER
ART UNIT 2674

RL
3/19/04